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Derek P. Freyberg Req. No. 29,250

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Edgardo Laborde, et al.

Confirmation No.: 7485

App. No.: 10/087,208

Art Unit: 1619

Filed:

February 27, 2002 /

Examiner:

Not yet Known

For:

ANTAGONISTS OF MCP-1 FUNCTION AND METHODS OF USE

THEREOF /

Commissioner for Patents Washington, DC 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

Applicants direct the attention of the Office to the documents listed on the attached Form PTO-1449 substitute (5 sheets), which may be relevant to the examination of this application.

This application claims the benefit under 35 USC 119(e) of Application No. 60/272,792, filed March 1, 2001.

The Examiner is requested to initial and return a copy of each of these forms with future communications relating to this application.

No representation is made by this Information Disclosure Statement that a search has been made; or that the information disclosed is, or is considered to be, material to patentability under 37 CFR 1.56(b).

Respectfully submitted,

Derek P. Fremberg Attorney for Applicants

Reg. No. 29,250

Customer No. 25213 Heller Ehrman White & McAuliffe 275 Middlefield Road Menlo Park, California 94025-3506 (650) 324-7014 October 2, 2002

(37 CFR 1.56, 1.97, and 1.98)

SHEET 1 OF 5

ATTORNEY DOCKET 25352-0031

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1619

U.S. PATENT DOCUMENTS

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† EX'R INITIAL	REF.#	PATENT NUMBER	DATE (MO/YR)	NAME	CLASS/ FILING DA SUBCLASS (If appropria
	1	3,823,144	07/1974	Schmitt et al.	260/268
:	2	4,269,990	05/1981	May et al	548/315
	3	5,977,108	11/1999	Kikuchi et al.	514/249
	4	6,140,338	10/2000	Naya et al	514/299
	5	6,288,103	09/2001	Faull et al	514/419
	6	6,316,449	11/2001	Bratton et al.	514/252.04
	7	6,329,402	12/2001	Kikuchi et al.	514/341
	8	6,342,516	01/2002	Umeda et al.	514/397

FOREIGN PATENT DOCUMENTS

			1.1			
† EX'R INITIAL	REF.#	COUNTRY	PATENT NUMBER	DATE (MO/YR)	APPLICANT	TRANSLATION?
-	9	FR ·	2 001 284 A	09/1969	Beecham Group Ltd.	equivalent to ref. #11
	10	JP	9-255572	09/1997	Takeda Chem Ind. Ltd.	Abstract
	11	GB	1 250 611	10/1974	Beecham Group Ltd.	
	12	PCT	92/14710	09/1992	Pierre Fabrer Medicament	Abstract
	13	PCT	97/24325	07/1997	Takeda Chemical Ind. Ltd.	
	14	PCT	97/44329	11/1997	Terjin Limited	
	15	PCT	98/02151	01/1998	Leukosite, Inc.	
	16	PCT	98/04554	05/1999	Banyu Pharma Co Ltd.	English Abstract Only, equivalent to Ref. #4
	17	PCT	98/06703	02/1998	Warner Lambert Co.	
	18	PCT	98/27815	07/1998	Merck & Co., Inc.	
	19	PCT	99/40072	08/1999	Boehringer Ingelheim Pharma	
	20	PCT	01/57044	08/2001	Daiichi Seiyaka Co.	Abstract
	21	PCT	01/57021	08/2001	Cor Therapeutics, Inc.	
'	22	PCT	01/57003	08/2001	Cor Therapeutics, Inc.	

OTHER DOCUMENTS

† EX'R INITIAL	1 .	CITATION (Author, Article Title, Journal/Book Title, Date, Pertinent Pages, etc.)
		Alam et al., "Increased MCP-1, RANTES, and MIP-1a in Bronchoalveolar Lavage Fluid of Allergic Asthmatic Patients", Am J Respir Crit Care Med, 153:1398-1404. (1996)

EXAMINER'S SIGNATURE

[†] EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609. Line through citation if not in conformance and not considered. *Include copy of this form in next communication to applicant.*

^{*} If an asterisk is placed beside the reference number, a copy is not provided because the reference was previously cited by or submitted to the PTO in a prior application that is identified in the statement and relied upon for an earlier filing date under 35 U.S.C. 120. 37 C.F.R. 1.98(d).

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1619

ÓTHERDÓCUMENTS

		OTHERSOCUMENTS
† EX'R NITIAL	* REF.#	CITATION (Author, Article Title, Journal/Book Title, Date, Pertinent Pages, etc.)
	24	Alcami et al., "Blockade of Chemokine Activity by a Soluble Chemokine Binding Protein form Vaccinia Virus", J Immunol, 160:624-633 (1998)
·	25	Antoniades et al., "Expression of monocyte chemoattractant protein 1 mRNA in human idiopathic pulmonary fibrosis", <i>Proc Natl Acad Sci USA</i> , 89:5371-5375 (1992)
	26	Ajuebor et al., "Endogenous monocyte chemoattractant protein-1 recruits monocytes in the zymosan peritonitis model", <i>Journal of Leukocyte Biology</i> , vol. 63:108-116, January 1998.
	27	Baggiolini et al., "Human Chemokines; an update", Annu rev Immunol (1997), pp. 15:675-705.
	28	Baggiolini, "Chemokines and Leukocyte Traffic, Nature vol: 392:9 pp 565-568, (1998).
-	29	Boring et al., "Decreased lesion formation in CCR2 ^{-/-} mice reveals a role for chemokines in the initiation of atherosclerosis", <i>Nature</i> , 394:894-897 (1998)
	30	Bright et al., "Identification of a Non Peptidic Rantes Antagonist", Bioorg Med Chem Lett, 8:771-774 (1998)
*	31	Campbell et al., "Monocyte Chemoattractant Protein-1 Mediates Cockroach Allergen-Induced Bronchial Hyperreactivity in Normal but Not CCR2" Mice: The Role of Mast Cells", <i>J Immunol</i> , 163:2160-2167 (1999)
	32	Luster, "Chemokines_Chemotactic Cytokines That Mediate Inflammation", The New England Journal of Medicine, pp. 436-445, February 12, 1998.
	33	Folkman and Shing, "Control of Angiogensis by Heparin and Other Sulfated Polysaccharides", Adv Exp Med Biol., 313:355-364 (1992)
	34	Forbes et al., "CCR2B Receptor Antagonists: Conversion of a Weak HTS Hit to a Potent Lead Compound", Bioorg Med Chem. Lett, 10:1803-1806 (2000)
11	35	36Gosling et al., "MCP-1 deficiency reduces susceptibility to atherosclerosis in mice that over express human apo37lipoprotein B", <i>J Clin Invest</i> , 103:773-778 (1999)
	. 36	Gu et al., "Absence of Monocyte Chemoattractant Protein-1 Reduces Atherosclerosis in Low Density Lipoprotein Receptor-Deficient Mice", Mol. Cell., 2:275-281 (1998)
	37	Hesselgesser, "Identification and Characterization of Small Molecule Functional Antagonists of the CCR1 Chemokine Receptor", <i>J. Biol Chem</i> , 273:15687-15692 (1998)
	38	Hoogewerf et al., "Glycosaminoglycans Mediate Cell Surface Oligomerization of Chemokines", Biochemistry 36:13570-13578, (1997).
	39	Hosaka et al., "Expression of the Chemokine Superfamily in Rheumatoid Arthritis", Clin Exp Immunol, 97:451-457. (1994)
	40	Hsieh et al., "Immunotherapy Suppresses the Production of monocyte chemotactic and activating factor and augments the production of IL-8 in Children with Asthma", <i>J Allergy Clin Immun</i> ol, 98:580-587 (1996)
<u></u>	41	Kitano M. et al., "Synthesis and Biological Activity of N-(Aminoiminomethly)-1H-Idoleca Rboxamide Inhibitors", Chem and Pharm Bulletin, Pharmaceutical Society of Japan, vol. 47, no. 11, 11/1999, pp 1538.
	42	Koch et al., "Enhanced Production of Monocyte Chemoattractant Protein-1 in Rheumatoid Arthritis", J Clin Invest, 90:772-779, (1992)
XAMINI	ER'S SIGN	VATURE

EXAMINER'S SIGNATURE

† EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609. Line through citation if not in conformance and not considered. Include copy of this form in next communication to applicant.

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(37 CFR 1.56, 1.97, and 1.98)

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FILING DATE

GROUP

February 27, 2002

1619

OTHER DOCUMENTS

OCT O 7 2002

		OTTER-BOOMENTO
† EX'R INITIAL	REF.#	CITATION (Author, Article Title, Journal/Book Title, Date, Pertinent Pages, etc.)
	43	Kunkel et al., "The Role of Chemokines in Inflammatory Joint Disease", J Leukocyte Biol, 59:6-12 (1996)
	44	Kurashima et al., "Increase of Chemokine Levels in Sputum Precedes Exacerbation of Acute Asthma Attacks", <i>J Leukocyte Biol</i> , 59:313-316, ((1996)
•	45	Kuschert et al., "Glycosamineoglycans interact selectively with chemokines and moldulate receptor binding and cellular responses", <i>Biochemistry</i> 38:12959-12968, (1999).
	46	Liang et al., "Identification and characterization of a potent, selective and orally active antagonist of the cc chemokine receptor-1", <i>The Journal of Biological Chemistry</i> , vol. 25:19000-19008, June 23, 2000.
,	47	McFadden and Kelvin, "New Strategies for Chemokine Inhibition and Modulation", <i>Biochem Pharmacol</i> , 54:1271-1280 (1997)
••	48	Mirzadegan et al., "Identification of the binding site for a novel class of CCR2bcemokine receptor antagonists", The American Society for Biochemistry and Molecular Biology, Inc., manuscript M000692200, (2000).
	49	Moore et al., "Tumor angiogenesis is regulated by CXC chemokines", J Lab Clin Med, 132:97-103 (1998.
	50	Moore et al., "CXC Chemokine Modulation of angiogenesis", J Investigative Medicine, vol 46:113-120 (1998)
	51	Murphy, :The Molecular Biology of Leukocyte Chemoattractant Receptors", <i>Annu Rev Immun</i> ,12:593-633, (1994)
	52	Nelken et al., "Monocyte Chemoattractant Protein-1 in Human Atheromatous Plaques", J. Clin Invest, 88:1121-1127 (1991)
	53	Okada et al., "Synthesis and Antitumor Activities of Water-Soluble Benzoylphenylureas", Chem Pharm Bull, 47:430-433, (1999)
	54	Okada et al., "Synthesis and Antitumor Activities of Prodrugs of Benzoylphenylureas", Chem Pharm Bull 42:57-61, (1994).
	55	Okada et al., "Synthesis and Antitumor Activities of Novel Benzoylphenylurea Derivatives", Chem Pharm Bull, 39:2308-2315 (1991).
	56	Proost et al., "The Role of Chemokines in Inflammation", Int J Clin Lab Res, 26:211-223, (1996)
	57	Robinson et al., "Chemokine expression in Rheumatoid Arthritis", Clin Exp Innumol 101:398-407 (1995)
	58	Rollins, "Chemokines", <i>Blood</i> , vol 90 no. 3, pp. 909-928, August 1, 1997.
	59	Rousseau, Jean-Francois et al., Chemical Abstract, "Regioselective ortho-directed metalation and electrophilic substitution of indoleand indoling -5-(N-phenyl) carboxamides" retrieved from STN database accession no. 136:355126 XP002206081 abstract & Heterocycles 92001), 55(12), 2289-2304.
	60	Rovin et al., "Chemotactic Factors and Renal Inflammation", <i>American Journal of Kidney Diseases</i> , 31:1065-1084, June 1998.
EYAMINI	ER'S SIGN	

EXAMINER'S SIGNATURE

OCT 0 8 2002

† EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609. Line through citation if net in EP 1600/2900 conformance and not considered. Include copy of this form in next communication to applicant.

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FILING DATE GROUP

February 27, 2002 1619

OTHER DOCUMENTS

		OTHER DOCUMENTS
† EX'R INITIAL	REF.#	CITATION (Author, Article Title, Journal/Book Title, Date, Pertinent Pages, etc.)
	61	Rovin, "Chemokines as Therapeutic Targets in Renal Inflammation", American Journal of Kidney Diseases, 34: 761-767, October 1999.
	62	Rovin, "Chemokine blokade as a therapy for renal disease", Current Opinion in Nephrology and Hypertension, 13:225-232, (2000).
	63	Rovin et al., "A Novel Polymorphism in the MCP-1 Gene Regulatory Region That Influences MCP-1 Expression", <i>Biochemical and Biophysical Research Communications</i> , 259, pp. 344-348, (1999).
	64	Saunders and Tarby, "Opportunities for novel therapeutic agents acting at chemokine receptors", Drug Discovery Today, vol. 4 No. 2 (1999).
	65	Schall, "Biology of the RANTES/SIS Cytokine Family", Cytokine, 3:165-183, (1991)
	66	Sendo et al., "Regulation of leukocyte adherence and migration by glycosylphosphatidyl-inositol-anchored proteins", <i>Journal of Leukocyte Biology</i> , vol. 66, pp. 369-374, September 1999.
	67	Servant et al., "Polarization of Chemoattract Receptor Signaling During Neutrophil Chemotaxis", <i>Science</i> , vol. 287: 1037-1040, February 11, 2000.
	68	Strieter et al., "The Immunopathology of Chemotactic Cytokines: The Role of Interleukin-8 and Monocyte Chemoattractant Protein-1", <i>J Lab Clin Med</i> , 123:183-197 (1994)
	69	Sugiyama et al., "Chemokines in Brochoalveolar Lavage Fluid in Summer-type Hypersensitivity Pneumonitis", Eur Respir J, 8:1084-1090 (1995)
	70	Szekanecz et al., "Cytokines in Rheumatoid Arthritis", Drugs and Aging, 12:377-390, May 12, 1998.
	71	Taub, D.D. "Chemokine-Leukocyte Interactions", Cytokine Growth Factor Rev, 7:355-376, (1996)
	72	Takeya et al., "Detection of Monocyte Chemoattractant Protein-1 in Human Atherosclerotic Lesions by an Anti-monocyte Chemoattractant Protein-1 Monoclonal Antibody", <i>Human Pathol</i> , 24:534-539 (1993)
	73	Tanaka et al., "T-cell adhesion induced by proteoglycan-immobilized cytokine MIP-1β", Nature, 361:79-82 (1993)
	74	Trivedi et al., "Chemokines: Targets for novel therapeutics", Annual Reports in Medicinal Chemistry, 35:191-200, (2000).
	75	Vaddi and Newton, "Comparison of biological responses of human monocytes and THP-1 cells to chemokines fo the intercrine-β family", <i>Journal of Leukocyte Biology</i> , vol 55: 756-761, June 1994.
	76	Villiger et al., "Production of Monocyte Chemoattractant Protein-1 By Inflamed Synovial Tissue and Cultered Synoviocytes", <i>J Immunol</i> , vol. 149, pp. 722-727, (1992).
	77	Vlodavsky et al., "Involvement of heparan sulfate and related molecules in sequestration and growth promoting activity of fibroblast growth factor", Cancer and Mtastasis Reviews 15: 177-186, (1996).
	78	Waltenberger et al., "Suramin is a Potent Inhibitor of Vascular Endothelial Growth Factor. A Contribution to the Molecular Basis of its Antiangiogenic Action", J Mol Cell Cardiol, 28:1523-1529, (1996)
	79	Wang et al, "Chemokines and their role in tumor growth and metastasis", <i>Journal of Immunological Methods</i> , 220: 1-17, (1998).
EXAMINI	FR'S SIGN	JATURE OTT

EXAMINER'S SIGNATURE

† EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609. Line through citation if not in conformance and not considered. *Include copy of this form in next communication to applicant.*

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APPLICATION NO.

10/087,208

APPLICANT(S)

Edgardo Laborde, et al.

FILING DATE

GROUP

February 27, 2002

1619

OTHER DOCUMENTS

	80	Wellstein and Czubayko, "Inhibition of fibroblast growth factors", Breast Cancer Res Treat, 38:109-119 (1996)
	81	White, "Identification of a Potent, Selective Non-peptide CXCR2 Antagonist That Inhibits Interleukin-8-induced Neutrophil Migration", <i>J. Bio Chem</i> , 273:10095-10098 (1998)
	82	Wrenshall et al., "Modulation of macrophage and B cell funtion by glycosaminoglycans", Journal of Leukocyte Biology, vol. 66:391-400, September 1999.
	83	Yang et al., "Fully human anti-interleukin-8 monoclonal antibodies: potential therapeutics for the treatment of inflammatory disease states", Jounal of Leukocyte Biology, vol. 66: 401-410, September 1999.
· ·	84	Yla-Herttuala et al., "Expression of Monocyte Chemoattractant Protein 1 in Macrophage-Rich Areas of Human and Rabbit Atheroslerotic Lesions", <i>Proc Natl Acad Sci USA</i> , 88:5252-5256 (1991)
	85	Zetzsche et al., Crossfire Beilstein 'Online' Beilstein Institut Aur Forerderung Der Wissenschaten, Frankfurt, DE; Abstract, Chemische Berichte, vol. 72, 1939, page 1599

EXAMINER'S SIGNATURE

† EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609. Line through citation if not in conformance and not considered. *Include copy of this form in next communication to applicant*.

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